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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,569	03/15/2004	Hideo Yoshizawa	KON-1859	9832
20311 7590 12/20/2006 LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			EXAMINER DOTE, JANIS L	
			ART UNIT	PAPER NUMBER
			1756	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/20/2006	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/800,569	<b>Applicant(s)</b> YOSHIZAWA ET AL.	
	<b>Examiner</b> Janis L. Dote	<b>Art Unit</b> 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-11 and 13-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The examiner acknowledges the amendments to claims 1 and 18 and the cancellation of claims 2 and 14 set forth in the amendment filed on Oct. 10, 2006. Claims 1, 3, 5-11, and 13-19 are pending.

2. The rejections under 35 U.S.C. 103(a) of claims 1-3 and 5-19 over Chambers combined with the other cited prior art, set forth in the office action mailed on Jul. 10, 2006, paragraphs 12-14, have been withdrawn in response to the showing in the Rule 132 declaration, which was executed by Hideo Yoshizawa on Oct. 11, 2006, and filed on Oct. 12, 2006. That declaration is sufficient to show that the Chambers photoreceptor surface layer in example 2 does not satisfy the surface roughness Ra requirement recited in the instant claims.

The rejections under 35 U.S.C. 103(a) of claims 1-19 over Japanese Patent 2001-265040 (JP'040) combined with the other cited prior art, set forth in the office action mailed Jul. 10, 2006, paragraphs 16-18, respectively, have been withdrawn in response to the amendment to claim 1 filed on Oct. 10, 2006. That amendment added the limitation that photoreceptor layer contains hydrophobic silica particles. As discussed in paragraph 16, JP'040 teaches a photoreceptor comprising a surface protective layer comprising a siloxane resin and metal

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oxide particles, such as colloidal silica. Translation, paragraphs 0037 and 0122. JP'040 does not teach or suggest that the colloidal silica be hydrophobic as recited in instant claim 1. Rather, JP'040 teaches that it is preferred that the "metal oxide particles have the compound groups with reactivity with the aforementioned organic silicate [sic: silicon] compound [with the hydroxy groups or hydrolytic groups of the compound] on the said particle surface . . . hydroxyl group [sic], amino groups and the like. By using the metal oxide particles with reactive group, the protective layer of the present invention form the resin layers in which aforementioned siloxane type resin and the said metal oxide particles surface bond chemically and is made into a composite, this becomes the resin layers with reinforced strength and elasticity . . ." Translation, paragraph 0041.

3. The examiner has determined that the instant specification has defined the following terms:

(1) The term "average circular degree," i.e., shape coefficient, of the toner is defined at page 16, line 12, to page 17, line 5, of the specification, as the average value of the equation:

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"shape coefficient = (circumference length of the circle calculated from the circle equivalent diameter of the toner particle)/(circumference length of the projection image of the particle)."

(2) The term "surface roughness Ra" recited in instant claim 1 was determined by the "center line roughness Ra defined in JIS B601 was extended to three dimension so that it can be applicable to a measured plane and is 'a value averaging absolute values of a deviation from a standard plane to a specified plane,'" expressed by the equation disclosed at page 14, line 14, to page 15, line 4, of the instant specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 18 is indefinite in the phrase "forming toner images by developing each of the latent images" because it is not clear what is developing each of the latent images. It is not clear whether each of the latent images is being developed with different developers. It is also not clear whether each of the latent images is required to be developed with a toner having the circular degree and comprising the wax recited in instant claim 1.

Claim 19 is indefinite in the phrase "the layer contains the inorganic particles . . ." (emphasis added) for lack of unambiguous antecedent basis in claim 1, from which claim 19 depends. Claim 1 recites that the photoreceptor layer comprises hydrophobic silica, not the broad inorganic particles recited in instant claim 19. It is not clear whether the "inorganic particles" recited in claim 19 refer to the hydrophobic silica particles recited in instant claim 1 or to another component of the photoreceptor layer.

Applicants' arguments filed on Oct. 10, 2006, with respect to the rejection of claim 18, have been fully considered but they are not persuasive.

Applicants assert that the amendment to claim 18 overcomes the rejection. Applicants further assert that the latent images are developed with the toner of claim 1.

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However, for the reasons discussed in the rejection above, the amendment to claim 18 did not overcome the rejection. Furthermore, claim 18 does not recite that the toner images are formed by the toner of claim 1. Rather, claim 18 merely recites "forming toner images by developing each of the latent images." Accordingly, the rejection of claim 18 stands.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. The reference US 2003/0180646 A1 (Asano) was published on Sep. 25, 2003, prior to the filing date Mar. 15, 2004, of the instant application. Accordingly, Asano qualifies as prior art under 35 U.S.C. 102(a), as well as under 35 U.S.C. 102(e).

8. Claims 1, 5-9, 13-15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano combined with US 2002/0076636 A1 (Uchida).

Asano teaches an image forming method that meets the steps recited in the instant claims but for using the particular toner recited in the instant claims. The Asano method comprises the steps of: (1) developing a latent image on a photoreceptor with a developer comprising a toner; (2) transferring the toner image

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to a recording medium; (3) fixing the toner image to the recording medium; and (4) removing the toner remaining on the photoreceptor with a cleaning device. Asano further teaches a full color image forming method comprising the steps of: (1) forming four electrostatic latent images on four photoreceptors, which correspond to a yellow image, a magenta image, a cyan image, and a black image, respectively; (2) developing the four latent images, respectively, with a yellow toner, a magenta toner, a cyan toner, and a black toner; (3) transferring the yellow toner image, the magenta toner image, the cyan toner image, and the black toner image from the four photoreceptors to a receiving member; (4) fixing the toner images to the receiving member; and (5) cleaning the toner remaining on each of the four photoreceptors with a cleaning device. Fig. 1; and paragraphs 0048-0051, 0061, and 0371. The photoreceptor comprises a conductive substrate and a surface layer that comprises hydrophobicity treated silica particles having a number average particle size of 45 nm. The surface layer has a surface roughness of 35.6 nm, i.e., 0.0356  $\mu\text{m}$ . See Preparation of Photoreceptor 22 in paragraph 0356 and in Table 6 at page 25, example 8. (Note that the photoreceptor nos. listed in Table 6 should have the numeral "2" before the stated number, e.g., 22 in example 8.) The Asano surface roughness Ra has the



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same definition as the surface roughness Ra recited in instant claim 4. See Asano, paragraphs 0116-0120 and paragraph 3 supra. The photoreceptor surface layer meets the surface layer limitations recited in instant claims 1 and 19. The cleaning device comprises an elastic rubber cleaning blade **66A** and a brush **66C**. Fig. 5, and paragraphs 0070 and 0077. The cleaning blade **66A** contacts the photoreceptor in a direction counter to the rotating direction of the photoreceptor, as recited in instant claim 7. Paragraph 0072. The brush **66C** comprises fibers having a thickness of 5 to 20 deniers. Paragraph 0084. The upper limit of the Asano fiber thickness range of 5 to 20 deniers is within the thickness range 6 to 30 deniers recited in instant claim 9. The Asano fiber thickness range also overlaps the range recited in instant claim 9. The cleaning blade meets the cleaning blade limitations recited in instant claims 6-8. The brush meets the brush limitations recited in instant claim 8 and 9.

As discussed supra, Asano does not disclose the use of the particular toner recited in the instant claims. However, Asano does not limit the type of toner used. Asano, paragraph 0010 and reference claim 1.

Uchida discloses a black toner comprising a colorant, a binder resin, and the ester wax no. 21, pentaerythritol

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tetrabeheenate. The toner has an average circularity of 0.964 with a standard deviation of circularity of 0.031. Ester compound No. 21 at page 3; Latex 1 in Table 1 at page 11; color particles group 1 in Table 2 at page 12 and Table 5 at page 13. The ester wax no. 21 meets the wax limitations recited in instant claims 1 and 15. The Uchida average circularity and standard deviation of circularity fall within the ranges of average circular degree and standard deviation of circular degree recited in instant claims 1 and 13 and in claim 14, respectively. The Uchida average circularity and standard deviation of circularity have the same definitions as the average circular degree and standard deviation of the circular degree recited in the instant claims. Uchida, paragraphs 0112-0113 and paragraph 3 supra. Uchida further discloses a yellow toner, a magenta toner, and a cyan toner that meet the toner limitations recited in instant claims 1 and 13-15. According to Uchida, its toner has excellent high fixing characteristics without the occurrence of offset. The toner provides high quality images after long storage. The toner provides stable images for many repeated uses. The toner minimizes the problem of photoreceptor filming and "deformation of image blurring." Paragraph 0005 and Tables 7 and 8, example 1.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Uchida, to use the Uchida toners in the image forming methods disclosed by Asano. That person would have had a reasonable expectation of successfully obtaining image forming methods that provide stable high quality single toner images or stable high quality full color images as taught by Uchida.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asano combined with Uchida, as applied to claim 8 above, further in view of additional teachings in Asano.

Asano combined with Uchida renders obvious an image forming method as described in paragraph 8 above, which is incorporated herein by reference. As discussed in paragraph 8 above, the Asano cleaning device comprises the brush **66C**. Asano further teaches that the density of brush fibers of the brush is from  $4.5 \times 10^2/\text{cm}^2$  to  $2.0 \times 10^4/\text{cm}^2$  (number of brush hairs per one square centimeter). Asano, paragraph 0086. The Asano density of brush fibers overlaps the density range of  $4.5 \times 10^2/\text{cm}^2$  to  $15.5 \times 10^2/\text{cm}^2$  recited in instant claim 10. Asano teaches that if the density of brush fibers is less than  $4.5 \times 10^2/\text{cm}^2$ , "not only rigidity is low and abrasion pressure is weak but also uneven abrasion is caused, which makes uniform removal of

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adhered substances impossible." If the density of brush fibers is not less than  $2.0 \times 10^4/\text{cm}^2$ , the "brush becomes too rigid to increase abrasion pressure which abrade a photoreceptor, resulting in generation of image defects such as fog due to reduced sensitivity and black streaks due to abrasion marks."

Paragraph 0086. Thus, the reference appears to recognize that the density of brush fibers is a result-effective variable. The optimization of a result-effective variable is presumably within the skill of the ordinary worker in the art.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Asano, to adjust, through routine experimentation, the density of the brush fibers in the cleaning brush in the Asano cleaning device, such that the resultant density of the brush fibers is within the density range recited in instant claim 10, and to use the resultant brush in the image forming method rendered obvious over the combined teachings of Asano and Uchida. That person would have had a reasonable expectation of successfully obtaining an image forming method that effectively removes adhered substances from the photoreceptor and that provides toner images without the occurrence of fog and black streaks, as taught by Asano.

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10. Claims 3, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano combined with Uchida, as applied to claim 1 above, further combined with US 6,338,929 B1 (Hagi).

Asano combined with Uchida renders obvious an image forming method as described in paragraph 8 above, which is incorporated by reference.

Uchida does not disclose that its toner comprises a metal salt of a fatty acid as recited in the instant claims. However, Uchida discloses that the toner may be "advantageously employed when combined with external additives of fine particles, such as fine inorganic particles and fine organic particles."

Paragraph 0123. Uchida does not limit the type of external additives used.

Hagi teaches toners comprising toner particles and a combination of four particular external additives. The combination of external additives comprises: (1) hydrophobic silica particles having a number-average particle size of 30 nm; (2) titanium oxide particles having a number-average particle size of 50 nm; (3) titanium oxide particles having a number-average particle size of 200 nm; and (4) calcium stearate having a volume average particle size of 5  $\mu$ m in an amount of 0.1 wt% of the toner. See col. 9, lines 53-68; col. 10, lines 1-14; and Table 1 at col. 11, example 2. The calcium stearate disclosed

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by Hagi meets the limitations of the fatty acid salt recited in instant claims 3 and 16. The calcium stearate amount of 0.1 wt% of the toner is within the amount range of 0.01 to 10% by weight of the toner recited in instant claim 17. According to Hagi, when a toner comprises such a combination of external additives, the adhesion and "wearability" (i.e., tending to wear) of the surface of the photosensitive material is suppressed, and the toner "exhibits the excellent rising property of the electrification, environmental stability and durability."

Col. 2, lines 12-22. Hagi further teaches that by externally adding the fatty acid metal salt, i.e., calcium stearate, to the toner, a "lubricative film is uniformly formed on the surface of the photosensitive member to prevent the adhesion on said surface, and the occurrence of BS [black spots] can be prevented (a lubricating function)." Col. 5, lines 53-57, and Table 3 at col. 13, example 2.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Hagi, to use the combination of the four particular external additives in example 2 of Hagi, which includes calcium stearate in an amount of 0.1 wt% of the toner, as the external additives in the toner in the image forming method rendered obvious over the combined teachings of Asano and Uchida. That person would have had a

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reasonable expectation of successfully obtaining an image forming method that suppresses the adhesion and wearability of the surface of the photoreceptor, that provides images with stable image density without the occurrence of fog under various environments, and that provides images without the occurrence of fog after many repeated runs, as disclosed by Hagi.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asano combined with Uchida, as applied to claim 8 above, further combined with Japanese Patent 09-274417 (JP'417). See the USPTO English-language translation of JP'417 for cites.

Asano combined with Uchida renders obvious an image forming method as described in paragraph 8 above, which is incorporated by reference.

Asano does not explicitly state that its elastic rubber cleaning blade **66A** applies a pressure of "5 g/cm to 30 g/cm" on the photoreceptors as recited in instant claim 11.

JP'417 discloses a cleaning device for removing toner from an organic photoreceptor that appears to be the same or substantially the same as disclosed by Asano. The JP'417 cleaning device comprises an elastic rubber cleaning blade **5** and a brush **4**. Translation, Fig. 1 and paragraphs 0013 and 0023.

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The cleaning blade 5 contacts the photoreceptor in a direction counter to the rotating direction of the photoreceptor, as taught by Asano. Translation, paragraphs 0014 and 0026. The brush 4 comprises fibers having a thickness of 6 to 30 deniers, which overlaps the density range of 5 to 20 deniers disclosed by Asano. The density of brush fibers is from  $4.5 \times 10^2 \text{ f/cm}^2$  to  $15.5 \times 10^2 \text{ f/cm}^2$ , which overlaps the density range  $4.5 \times 10^2/\text{cm}^2$  to  $2.0 \times 10^4/\text{cm}^2$  taught by Asano. Translation, paragraphs 0017-0019. JP'417 teaches that the pressure of the blade to the surface of photoreceptor is from 5 g/cm to 30 g/cm. Translation, paragraphs 0013 and 0023. The pressure of 5 g/cm to 30 g/m meets the pressure range recited in instant claim 11. According to JP'417 when the pressure under which the elastic rubber blade is pressed onto the photosensitive material surface is lower than 5 g/cm, "it becomes impossible to achieve sufficient cleaning effects, due to which secondary toner transfers, etc. become unavoidable." When the pressure exceeds 30 g/cm, the "abrasion wear of the photosensitive material becomes conspicuous, accompanied by a photosensitive material sensitivity loss, due to which image defects such as fogging, etc. become unavoidable." Translation, paragraph 0025.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of JP'417, to use the



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contact pressure taught by JP'417 between the surface of the photoreceptors and the rubber cleaning blade **66A** in the cleaning step in the image forming method rendered obvious over the combined teachings of Asano and Uchida. That person would have had a reasonable expectation of successfully obtaining an image forming method that effectively removes toner remaining on the surface of the photoreceptors and that provides the images that are free from the defects of fog, as taught by JP'417.

12. Applicants' arguments filed on Oct. 10, 1006, as applied to the rejections over Asano in paragraphs 8-11 above have been fully considered but they are not persuasive.

Applicants assert that the Rule 131 declaration and the evidence that the inventors were in possession of the claimed invention before 102(e) date of Asano, Feb. 28, 2003, filed on Oct. 10, 2006, overcome the rejections over Asano.

(The examiner notes that the Rule 131 declaration improperly identifies the instant application as Application No. "10/776,791 filed on Feb. 11, 2004." The correct number and date are 10/800569 filed on Mar. 15, 2004.)

The declaration filed on Oct. 10, 2006, under 37 CFR 1.131 has been considered but is ineffective to overcome the Asano reference for the following reasons:

(1) The Rule 131 declaration does not state that the invention was conceived and reduced to practice in this country or a NAFTA or a WTO member country. (37 CFR 1.131(a), third and fourth sentences.)

(2) It fails to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Asano reference.

37 CFR 1.131(b) states that "[t]he showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference . . .

Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence must be satisfactorily explained" (emphasis added).

The examples and tests described in the translation are not the original exhibits of drawings or records, or photocopies thereof. At best, they are merely a "report" of the work the declarants state was performed by them or under their supervision at least as early as Dec. 24, 2002. The declaration filed on Oct. 10, 2006, provides no explanation as to why copies of "original exhibits" were not presented. On the present record, the examiner cannot make a reasonable determination whether the instantly claimed invention was actually reduced to

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practice prior to the effective date of Asano. The examiner cannot make a reasonable determination whether actual examples were made under the same conditions as reported in the translation, or whether actual test results were obtained as reported in the translation. The examples and tests described in the translation do not appear to meet the "documentary evidence" required under 37 CFR 1.131(b) to establish a reduction to practice of the invention. Accordingly, the certified English-language translation of the published Japanese Patent Application P2004-205618 filed on Jan. 10, 2006, does not meet the requirements of 37 CFR 1.131(b) to show that applicants actually reduced the invention to practice prior to Feb. 28, 2003.

Moreover, even if the alleged examples and test results had been presented in copies of original records, the Rule 131 declaration fails to recite sufficient facts for the examiner to determine which of the claim limitations are satisfied by the examples described in the translation. The declaration does not specifically state what each of the examples relied upon shows. The declaration merely states that the "tests and examples reported in JP'618 were performed by us or under our direct supervision at least as early as December 24, 2002. This evidences the fact that we actually reduced to practice the

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subject matter of this U.S. Application at least as early as December 24, 2002." This statement does not explicitly indicate what examples are relied on. Nor does this statement clearly state what claim limitations are satisfied by the examples. The declaration and exhibits must clearly explain which facts or data applicants are relying on to show completion of their invention prior to the reference date. In addition, any missing claim limitation that is not supported by the exhibits must be supported by the declaration itself. "Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice 'amounts essentially to mere pleading, unsupported by proof of a showing of facts' and thus, does not satisfy the requirements of 37 CFR 1.131." MPEP 715.07.I.

Accordingly, the Rule 131 declaration filed on Oct. 10, 2006, is ineffective to overcome the Asano reference. The rejections set forth in paragraphs 8-11 above stand.

13. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLD  
Dec. 13, 2006

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